

Lab SERVICES

SMARTCARD AND SECURE ELEMENT TESTING



FIME®

One Action. A billion transactions.



One-stop service to achieve global and domestic certification

COMPLETE ALL REQUIREMENTS WITH EXPERT GUIDANCE

To achieve full certification, card products must align with various requirements and standards, both globally and locally. Working with one partner who provides certification services for both international and domestic payment schemes greatly simplifies the certification process and accelerates time to market.

GLOBAL EXPERTISE, LOCAL PRESENCE

FIME is a market-leading laboratory, having worked with key authorities and vendors since 1995. Our strong pedigree with EMV migration has equipped us with unrivalled knowledge and expertise at both global and regional levels.

As we extend our service scope and coverage, FIME established teams across locations worldwide, ensuring we remained closely connected to local schemes and our customers.

In addition to the testing service performed at FIME, we also work with a selection of partners to offer a full service portfolio which enables us to support you with your product from planning and testing, right through to launch.

Testing service scope

- Physical conformity and durability.
- Analog, digital and interoperability.
- Application and performance.
- Security evaluation.

+ KEY BENEFITS

- One-stop service for your projects.
- Project management teams available in your regions.
- Wide range of services supporting most major schemes.
- Experienced technical testing team.
- Parallel service available to efficiently progress projects across multiple locations.
- Bundled offer for multi-brand projects.



eftpos

elo

EMVCO

GLOBALPLATFORM



NETS

RuPay



VISA



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LEARN MORE



www.fime.com/services/smartcard-and-sim-testing/smartcard-testing-services.html

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SERVICE PORTFOLIO

Payment schemes

BRANDS	SMARTCARD	SECURE ELEMENT (SE)
American Express	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 • Physical conformity 	SE Level 2
Discover	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 	SE Level 2
eftpos	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 	N/A
elo	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 	N/A
EMVCo	<ul style="list-style-type: none"> • Contact Level 1 • Contactless Level 1 • CCD and CPA Level 2 	AAUI / PPSE
GlobalPlatform	<ul style="list-style-type: none"> • Contact Level 2 • Contactless Level 2 • SWP/HCI 	SE Level 2
Interac	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 	SE Level 2
JCB	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 	SE Level 2
Mastercard	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 • Physical conformity (CQM) 	SE Level 2
NETS	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 	N/A
PURE	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 	N/A
RuPay	<ul style="list-style-type: none"> • Contact Level 1 & Level 2 • Contactless Level 1 & Level 2 	N/A
UnionPay	<ul style="list-style-type: none"> • Contact Level 2 (Card manufacturing) • Physical conformity (IC perso, IC embedding, Magstripe perso) 	N/A
Visa	<ul style="list-style-type: none"> • Contactless Level 1 & Level 2 • Contact Level 1 & Level 2 	SE Level 2

Physical conformity and durability

Authorities and standardization bodies

- American Express
- ANSI 322 | ANSI 440
- Bancontact
- Carte Bancaire
- ISO 10373-1 / ISO 10373-2 / ISO 7810 / ISO 7811 / ISO 7816 / ISO 24789 / ISO 18745-1
- GIE Sesam-Vitale
- Mastercard (CQM and CSI)
- UnionPay card manufacturer
- Visa innovation card
- Tailor-made test plan based on customer request

Security evaluation

- American Express
- Common Criteria
- Discover
- EMVCo
- Interac
- JCB
- Mastercard CAST
- Production site - PCI card introduction security
- Visa VCSP



Service types

In-house testing

- Pre-testing performed at your premises by one of our experts.
- Trouble shooting analysis quickly identifies and resolves issues.

Debug testing

- Pre-testing based on formal test requirements and debug reviews simplifies the type approval process.
- Spy logs support troubleshooting analysis.

Type Approval

- Formal testing stage, including the full results and reports required to acquire Letter of Approval (LoA).

Complementary offer

TESTING TOOLS

EMVeriCard

- Electrical and protocol libraries for EMVCo Contact Level 1 testing.

Smartsy Contact and Smartsy Contactless

- Spy communication with cards.

Greenlight Performance

- Performance testing.

Global

- Functional Level 2 testing.

Observation test bench

- Side-channel analysis.

Perturbation test bench

- Fault injection.

Development phase

- In-house testing
- Debug testing

Final prototype

- Type approval

Project launch

- LoA

Project development phases.